

U.S. Patent Application Serial No. 10/530,412  
Amendment filed September 6, 2006  
Reply to OA dated June 6, 2006

**AMENDMENTS TO THE CLAIMS:**

Please cancel claim 4 without prejudice or disclaimer, and amend claim 1, as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Currently amended): An agglomerate comprising fine primary particles of ~~an inorganic compound except for silica~~ a synthesized calcium carbonate, the agglomerate satisfying the following expressions (a) to (e):

$$(a) 0.5 \leq dp_{50} \leq 20 \quad [\mu m]$$

$$(b) 0 \leq \alpha \leq 2.5 \quad [-]$$

$$(c) 30 \leq Sw \quad [m^2/g]$$

$$(d) 20 \leq St \leq 150 \quad [MPa] \text{ and}$$

$$(e) 200 \leq Sta \leq 600 \quad [MPa],$$

wherein

$dp_{50}$ : the average particle diameter [ $\mu m$ ] of the agglomerate measured by Microtrac-FRA, a laser analysis type particle size distribution measurement apparatus,

$\alpha$ : the value calculated by dividing the difference between the particle diameter  $d_{90}$  of cumulative 90% minus sieve particles of the agglomerate and the particle diameter  $d_{10}$  of cumulative 10% minus sieve particles of the agglomerate calculated by the Microtrac-FRA, a laser analysis type

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particle size distribution measurement apparatus by the average particle diameter  $dp_{50}$  according to the following equation:

$$\alpha = (d_{90} - d_{10})/dp_{50},$$

$d_{90}$ : the particle diameter of cumulative 90% minus sieve particles of the agglomerate measured by the Microtrac-FRA, a laser analysis type particle size distribution measurement apparatus,

$d_{10}$ : the particle diameter of cumulative 10% minus sieve particles of the agglomerate measured by the Microtrac-FRA, a laser analysis type particle size distribution measurement apparatus,

$Sw$ : the BET specific surface area of the agglomerate [ $m^2/g$ ],

$St$ : the tensile strength [MPa] required to break the agglomerate with the particle diameter  $4\mu m$ , measured by a MCT-W500-J micro compression testing machine manufactured by Shimadzu Corporation under conditions of 9.8 mN in load and 0.892405 mN/sec in load speed, and

$Sta$ : the tensile strength [MPa] required to break 30% of the particle diameter of the agglomerate with the particle diameter  $4\mu m$ , measured by a MCT-W500-J micro compression testing machine manufactured by Shimadzu Corporation under conditions of 9.8 mN in load and 0.892405 mN/sec in load speed.

Claim 2 (Previously Presented): The agglomerate according to claim 1, wherein the agglomerate satisfies the solidified apparent density satisfies the following expression (f):

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$$(f) 0.2 \leq \rho_{bp} \leq 0.8 \quad [\text{g/cm}^3],$$

wherein

$\rho_{bp}$ : the solidified apparent density [ $\text{g/cm}^3$ ] of the agglomerate powder measured by a powder tester manufactured by Hosokawa Micron Co., Ltd., based on the Carr Theory.

Claim 3 (Previously Presented): The agglomerate according to claim 1, wherein the agglomerate is surface-treated with at least one kind selected from aliphatic acids, alicyclic carboxylic acids, aromatic carboxylic acids, their sulfonic acids and resin acids, their metal salts, ammonium salts, amine salts, esters; aliphatic, alicyclic, and aromatic sulfonic acids; coupling agents; silicone oils; paraffin; copolymers of  $\alpha, \beta$ -monoethylenically unsaturated carboxylic acids and monomers copolymerizable with  $\alpha, \beta$ -monoethylenically unsaturated carboxylic acids, their metal salts ammonium salts, amine salts, esters; phosphoric acid esters; and industrial soaps.

Claim 4 (Canceled):

Claim 5 (Previously Presented): A resin composition containing a resin mixed with the agglomerate according to claim 1.

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Claim 6 (Original): The resin composition according to claim 5, wherein the resin is selected from polyolefin resins, polyester resins, polyamide resins, polyvinyl chloride resins, and biodegradable resins.

Claim 7 (Previously Presented): The resin composition according to claim 5, wherein the resin composition is in the form of a film, a sheet or a fiber.

Claim 8 (Previously Presented): The agglomerate according to claim 2, wherein the agglomerate is surface-treated with at least one kind selected from aliphatic acids, alicyclic carboxylic acids, aromatic carboxylic acids, their sulfonic acids and resin acids, their metal salts, ammonium salts, amine salts, esters; aliphatic, alicyclic, and aromatic sulfonic acids; coupling agents; silicone oils; paraffin; copolymers of  $\alpha,\beta$ -monoethylenically unsaturated carboxylic acids and monomers copolymerizable with  $\alpha,\beta$ -monoethylenically unsaturated carboxylic acids, their metal salts ammonium salts, amine salts, esters; phosphoric acid esters; and industrial soaps.

Claim 9 (Previously Presented): The agglomerate according to claim 2, wherein the agglomerate comprises calcium carbonate.

Claim 10 (Previously Presented): The agglomerate according to claim 3, wherein the agglomerate comprises calcium carbonate.

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Claim 11 (Previously Presented): A resin composition containing a resin mixed with the agglomerate according to claim 2.

Claim 12 (Previously Presented): A resin composition containing a resin mixed with the agglomerate according to claim 3.

Claim 13 (Previously Presented): The resin composition according to claim 11, wherein the resin is selected from polyolefin resins, polyester resins, polyamide resins, polyvinyl chloride resins, and biodegradable resins.

Claim 14 (Previously Presented): The resin composition according to claim 12, wherein the resin is selected from polyolefin resins, polyester resins, polyamide resins, polyvinyl chloride resins, and biodegradable resins.